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THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

VOL. VIII. NO. 41. CLEVELAND, O., OCTOBER 14, 1886. $2.00 PER ANNUM SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

The tug Hawley put on a new wheel last week.

Two hundred vessels are now documented at this port, aggregating 95,000 net tons.

The tug Stone towed a lighter to Ashtabula to begin work on the piers at that port.

The schooner Quinby has made twenty-seven trips to Amherstburg, coal laden, this season.

The Mutual Transit Company, organized two weeks ago in this city, held the first meeting last Friday.

The tug Record will get away to-day with the barges J. A. Smith Sea Gull and one other.

Another advance of 12½ cents on the Michigan scale of lumber freight rates is looked for this week.

Mr. A. Parker, of the firm of Parker & Millen, of Detroit, the well known vessel agents and owners at that port, was in this city last week.

The Michigan, launched this season at Davidson's West Bay City yard, built for the purpose of transporting logs from Georgian Bay, was in port last week.

On another page will be found an invitation from Major L. Cooper Overman for proposals to deliver rubble stone for the foundation of the Cleveland breakwater.

The tug N.P. Gates, Captain C. F. Brown, struck a sunken log at the mouth of the river last week, putting a hole through her bottom which let water enough in to put the fires out. She was run into the mud in a slip to avoid sinking.

The Cleveland fire tug has been named Weatherly, as was surmised by the RECORD last week. Mr. Weathely was one of Cleveland's first firemen. Many of the statesmen now living feel aggrieved because the honor was not conferred on them.

Captain James Corrigan has added the barge Carney to his fleet, the price being $10,000. This is the last of Captain Davidson's fleet. The Carney was thoroughly rebuilt and given a new rating this summer, and will carry limestone from Kelley's Island to the Corrigan kilns at Duluth.

At Globe drydock the repairs to the schooner Reindeer consist of a piece of new frame, some new plank, part new ceiling inside and bottom recalked; the waterlogged schooner Dacota had buts calked, and some plank in bow and stern; the tug Hawley was in dock for a new wheel and tug L. P. Smith to have her wheel tightened and some calking; the barge Sylvia Morton had buts calked and propeller Kitchen had a leak stopped.

The investigation of the cause of the tug Patrick Henry running against the breakwater last week, by Inspectors McGrath and DeWolf has resulted in the revocation of the licenses of Captains Dennis Driscoll and Thomas Hughes. Under the circumstances it is a miracle that the tug did not run into some of the outward bound craft, as many were windbound the previous day and there were a number of them about the entrance to the harbor and for several miles out.

Owing to the reorganization of the Globe Iron Works, the drydock firm heretofore known under the name of Presley & Co., has changed its title and is now known as the Cleveland Drydock Company. The papers recite that the company is organized for the purpose of ship-building, drydocking, repairing, and dealing in steamboats, sail vessels, and other water craft, and all things connected therewith or incidental thereto, for profit. It has a capital stock of $150,000, divided into 1,500 shares of $100 each. The incorporators are Captain George Presley, J. F. Pankhurst, Robert Wallace, John R. Cowle, and Henry D. Coffinberry. The incorporation papers were accompanied by an affidavit that the old Cleveland Drydock Company, corporated about twenty years ago, had long since retired from business, and the most of those interested in it had died. This statement is made for the reason that it has been demonstrated bad policy to incorporate two companies in the same city by the same name, and in several cases this has led to trouble and litigation.

CHICAGO.

Special to the Marine Record.

The barge Tracy J. Bronson, coming out of Allen's slip, in tow of the tug Rebel Monday evening, was backed into the dock and had her rudder broken, also the castings on deck.

The schooner Live Oak is to be sold at marshall's sale at this port October 20th at 11 a. m.

Lincoln Miller of the firm of Miller Brothers, shipbuilders, returned from his wedding tour on Monday.

Captain Davis will take his steam yacht Barney to New Orleans where he hopes to improve his health, he has been suffering from bronchitis for some months.

At Miller Brothers drydock the propeller Favorite was in dock for some calking, one new wheel and fixing her stern bearings. The propeller Delaware for a new wheel the steambarge Rube Richards a new rudder pintle, the tug Chicago for some calking, the propeller Fred Mercur for calking the schooner O. R. Johnson, scow Rockaway and steambarge George Dunbar to have leaks stopped, tug Carpenter for fixing stern bearing, the tug Van Schaick to have a line taken out of her wheel. The barge Alert received a new rudder. The steamer Pearl was at the derrick and had her stern bearing fixed.

At the Chicago Drydock Company's yard the steambarges Swallow and Fayette were in dock for new wheels; the schooner C. J. Mixer for calking; the barge Wayne received a new cathead; the schooner Mott a new dolphin striker and repairs to rail; the steambarge City of New York had her decks and ceiling calked; the barge Newcombe a new anchor stock; the barge Tracy J. Bronson repairs to her rudder; the schooner W. O. Goodman a new cathead; the schooner G. C. Finney new windlass bits; schooner S. V. R. Watson and steambarge Argonant some repairs.

The steambarge Douglas, coming down the river last Thursday, collided with the tug Mosher towing the propeller Frost, going up. The tug received damages to the amount of some $50.

John Saveland, of Milwaukee, paid a visit to this city last Thursday. He has purchased the steambarge New Era.

WILLIAMS.

SARNIA.

Customs officer Adams caught the tug Balize in port here last week and immediately seized her for wrecking the schooner Alice B. Norris, ashore at Point Edward in May last. The captain acknowledged the corn and secured a release by leaving a deposit with the collector of customs, pending the decision of the department at Ottawa. The Balize on this occasion had five vessels in tow and was forced in here by stress of weather. The tug had barely made fast to the dock when officer Adams put the government mark on her and made her pay tribute.

ST. CLAIR FLATS.

There was a heavy fog on the river all night, which caused a delay of shipping for the time. The Roanoke is still on at the foot of Star Island. Tugs are working at her. The United Lumbermen went aground in Sarnia Bay and was released Monday morning.

TOLEDO.

Special to the Marine Record.

Manager A. W. Colton of the Wabash line denies the statement that the Wabash people are negotiating for the sale of the boats of that line to the Vermont Central line. He says that the boats were offered for sale last season, but that now they have no cause to sell them. He speaks in the most confident terms of the good business in store for lake carriers.

BUFFALO.

Special to the Marine Record.

Our lake business during the week has been steady and the volume about the same as previous weeks. The arrivals and departures have varied but little, the most notable feature being a scarcity of hard coal, said to be caused by lack of transportation. Cars are very scarce in any one branch of trade, and the road managers say it is impossible to furnish a sufficient number to their best customers. It may be traceable to a cause other than an increase of business. For some time a new rule has been adopted by coal dealers, which is to deliver both hard and soft coal to the purchaser, at a point designated by him for so much per ton, which included freight by rail or water. Some of these contracts were based on a much lower freight rate that the rate of to-day. May we not suspect this to be one of the causes of short supply? Many roads are largely interested in heavy contracts, which, to say the least, is a ruinous business in the face of a general revival of trade such as we now seem to have. It is not to be wondered at if these great corporations look after the paying business with more favor than that in which it is not hard to find a deficit; railroads are human and often err. Why not return to the old custom of selling coal afloat, subject to the ruling rate of freight the day of shipment, be it high or low. They would not be obliged to resort to such tactics as prevail to-day to keep freights down. The first of the week a dollar was freely paid, and might be said to be firm at that rate. To-day that rate is ten cents off, and it may go down further before this goes to press. We quote 90 cents.

Captain James Todd of the propeller Wissahickon has been appointed master of the new steel steamship Susquehanna of the Anchor line. Christopher Mason, mate of the Wissahickon, was promoted to her command. The Susquehanna is expected to be ready for sea early in November, so as to make one or two trips to Chicago this fall.

Owing to illness Captain Van Alstyne has resigned command of the schooner, W. I. Preston and gone home. Captain W. H. Preston of Oswego was sworn in as her master.

Further libels for wages and supplies have been filed against the steamer F. E. Spinner. The aggregate of the claims thus far filed in about $35,000. The marshal will make his first return in this case on October 19. She will probably be sold.

The new Frontier elevator at Michigan street and the Blackwell, though not yet all covered, is in running condition. The propeller Nebraska and schooner M. I. Wilcox are waiting to be unloaded there. Some injury is reported to have been done to the building Saturday by the dropping of heavy weights used in testing her scales.

The Express says Ryan's new tug, the Christian, is still on the independent course, though the line tugs have succeeded in keeping her out of a tow so far. In order to do this they have all put on provisions, a cook, and an extra amount of coal, and some of them are stationed up the lake about off Dunkirk to intercept vessels bound down. The Christian also went up the lake yesterday afternoon. As it costs ordinarily from $20 to $25 a day to run a harbor tug, this style of sport is likely to become expensive after a while.

WM.

MINORVILLE.

At 11 p. m. Monday when the barge T. H. Smith had been twenty minutes on her way to Chicago, with a flat scow and the schoon Westchester and Peoria in tow, the scow's deck load of dry cedar ties was discovered to be in flames. The tug Spaulding and the lifeboat crew quickly responded to the call for help, but after strenuous efforts to save the cargo and craft both had to be abandoned. Loss on cargo $2,000; on scow, about $600 No insurance. Cause of the fire, sparks from steambarge.

EAST SAGINAW.

Special to the Marine Record.

The Moiles Brothers' fleet of tugs, consisting of the Tom Dowling, Laura Gibbs, and Frank Tracy, have arrived in the river from the Sault ste Marie, where they have been engaged during the summer in log towing for the John Spry lumber company, of Chicago. The owners have made some minor repairs during the week at Bartlett & Company's works. The tugs will do service on the river for the balance of the season.

The schooner Crawford loaded in the river during the week.

The tug Robert Weideman had a new key and other repairs made to her wheel and stern bearing at Bartlett's.

Mr. Robert McNiff, of McNiff & Son's, of St. Clair Flats, paid a business visit to this port during the week. Friend Bob is looking after the interests of the MARINE RECORD, and a good representative he makes, too.

The steamer J. C. Licken brought into port on Wednesday from Sebewaing a complete cargo of household goods, seven families having chartered the steamer, jointly.

The tug Peter Smith and log barge Wahnapatea, the latter with 700,000 feet of logs for the Saginaw lumber and salt company, arrived in the river on Tuesday from French river.

The barge Mary Stockton was libeled at this port on Friday, on claims amounting to $300 for towing.

There was some excitement among vessel owners on Wednesday morning, and in fact throughout the day, owing to the fact that the same old trouble was revived between the rival organizations whose members work along the river as vessel loaders. At Bay City the organization goes under the name of the Saginaw Valley 'longshoreman's union, the branch down there being known as No. 1, and that up here and in Saginaw City as No. 2. The steambarge Birckhead with her tow, consisting of the Troy, Brainard and two other vessels, all belonging to the T. & S. T. Company, commonly known as the Black line, came into the river. The Troy was loading at Sears & Holland's mill with 'longshoremen who did not belong to the Saginaw Valley union, and the Bay City organization, hearing of this, had their representative, George Fargo, order all their members who were at work on any of the vessels of the above line to knock off from work until what they termed the outsiders were discharged. The result was that the Brainard, which was loading at Pitts & Cranage's mill, Bay City, and other vessels of the Black line, loading at mills down there, were all deserted by the men engaged inloading. Then the vessel men, captains and others went to work to get substitutes, and as they could not be found in Bay City, men were in request from East Saginaw. At 12:25 some sixty-five men belonging to the organizations up here who claim to be the original 'longshoreman's union, and under the protection of the Knights of Labor, left on a train for Bay City, on the Flint & Pere Marquette road to load the vessels on which the rival union refused to work. Police protection, it is asserted, has been offered to those who have gone down, by the Bay City authorities, and one well known vessel owner said that he would make it warm for the first man who steps on any of his vessels to interfere with his men. On Thursday morning about thirty men from this city left for Bay City to finish loading the boats, started by them the day before. On their arrival they found about three hundred men were in waiting at the depot and forbade them getting off the train. Several had broken noses in no time and the crowd returned to this city. The 'longshoremen, on Friday night, after a long and exciting meeting, decided to consolidate the rival organizations, and work on the boats has been resumed. Several hundred men were interested.

SHAW.

[*Continued on 5th page.*]

THE SAULT CANAL AND HAY LAKE CHANNEL.

Major Farquhar's recent visit to Duluth was in behalf of a measure which has an almost direct bearing on Buffalo, in which he became interested during the last session of congress, and which he proposes to fight until the whole thing is an accomplished fact. It was largely through the efforts of Major Farquhar that an appropriation of $250,000 was obtained for the beginning of work on a new lock in the Sault canal, and $150,000 for the improvement of the Hay Lake channel. As all engaged in lake commerce will readily see, these two improvements mean a great benefit to this city, as well as Duluth and other Lake Superior ports. Major Farquhar visited Duluth for the purpose of more actively interesting the board of trade and individual members of that now thriving city in the scheme for pushing these improvements through. Statistics are to be gathered showing the vast territory that is now tributary to Duluth by means of its railroads and proposed extension of waterways. Duluth has the Northern Pacific, which brings the trade of the northern belt; the St. Paul, Minneapolis & Manitoba railroad, which carries the product of the Red River Valley; the St. Paul & Duluth, which connects the lake with the mills of St. Paul and Minneapolis; and the Chicago, St. Paul, Minneapolis & Omaha, extending into Southern Minnesota, Iowa, and Southern Dakota.

"Now," said Major Farquhar, "all this territory, and much more, in the near future must, from force of circumstances, seek Duluth as the outlet for its productions. The present lock in the canal, by which the falls of St. Mary's river are overcome, is 500x80 feet, with a depth of 16 feet of water. What we propose is to build another lock 700 feet long between gates, with 21 feet of water, so that boats drawing 20 feet can be locked through. Now, we have the starter for this work. Surveys and estimates are made, plans drawn, and $250,000 appropriated. Next year we hope to get another $250,000, and then, in the Fiftieth Congress, the remainder of the million and a half must come. The present lock, so I am informed by lake men, can not begin to care for the business during a rush. The result is a delay, something under which no man is patient. Time is money in such cases, and considerable money, too. But the old lock and the new will do away with all this. With the depth of water increased to 21 feet the size of boats would be enlarged. On this point Horatio Seymour, Jr., said some time since: 'The iron or steel vessels that would be built could withstand any ordinary storm and keep on their course; they would be of ocean model; with the same crew and a little more coal they could carry grain from Chicago or Duluth to Buffalo for less than is now charged, and make a fair return on the investment, transporting 3,500 tons instead of 2,400 tons.'

"Duluth has grown wonderfully lately, and its importance is bound to increase still more. In 1880 the receipts of coal there were 60,000 tons; in 1885 they were 600,000. The shipments of wheat in 1880 were 1,453,674 bushels; in 1885, 13,458,127, and this year they will reach 18,000,000. With the natural growth of the vast grain territory west of Duluth, these shipments must continue to increase, and with the improvement of the Hay Lake channel and the building of the new St. Mary's lock there is no good reason why all this should not come directly to Buffalo. Certainly such business is worth striving for.

"This city, with the Erie canal to the seaboard, is the natural outlet for all the product of this great territory, and to this city it must come. It will come all the sooner when these improvements for which I am now at work are made. By the time St. Mary's lock and the Hay Lake channel are as they should be the connections between Lakes Erie and Huron will undoubtedly be made so that boats drawing 20 feet of water can pass from Duluth to Buffalo without any trouble.

"The improvement of the Hay Lake channel is most desirable. Now boats are obliged to tow sixty miles to make forty-eight, and moreover the present channel is partly through Canadian waters. It is also a dangerous course, for boats do not dare to go throuh in the night time, and vessels are, therefore, often obliged to lay over a whole night—so much wasted time, and a costly waste, too. The improvement of this channel will, therefore, save twelve miles of towing and much valuable time.

"Now as to how this will directly benefit Buffalo. Duluth, and all the vast territory reached through her, must be supplied with coal mined in Pennsylvania and brought to this city for distribution. Buffalo is the natural market for Duluth business and it should be brought here. Wheat can be brought to Buffalo much cheaper than it can be carried to Chicago and from there sent to the seaboard. That is self-evident. There is no good reason why we should not store the grain here instead of nearly all of it being held at Duluth and Chicago. The Duluth people want us to bulk and grade grain. If we do that we can knock Chicago out in short order on Duluth business. I am glad to see that something in that line is already being done. Our merchants might just as well as not have the resulting commissions, and our elevator men the storage charges. Then there is another class who will be benefited, and as is well known, that class is quite numerous. I refer to the scoopers and longshoremen. With the Duluth business brought to its natural outlet you can readily see the advantage which would result to them.

"Now, with large boats, which are sure to follow the improvements I am interested in, transportation must necessarily be cheaper; a profitable businesss can be done on a closer margin. A boat bringing wheat from Duluth to Buffalo is sure of a return load of coal. There you have a profitable business both ways. All our present elevator room and much more would be needed to care for the grain. What more could a person want?"—*Buffalo Express.*

The shipment of Montana cattle via Duluth and the great lakes to the eastern markets is only a question of a short time. The only difficulty at present is the lack of proper acommodations on the boats, but it is understood that at a very little outlay all the large boats could be so arranged as to carry cattle. The people of Montana are looking to Duluth for an outlet.—*Duluth Herald.*

RECORD OF VESSEL PASSAGES.

PASSED DETROIT.

DETROIT, Oct. 7.—Passed up, morning—Steambarge Nipigon and three barges, tug Mocking Bird, propeller Fountain City, steambarge Wm. Chisholm, propeller New York, schooner H. D. Root, tug Shoo Fly, schooner Atmosphere, steambarge Ogemaw and three barges.

Afternoon—Steambarge Garden City and five barges, tug Crawford and schooners M. F. Merrick, Wm. Shupe, steambarge S. Langell, schooners S. M. Stephenson, F. M. Knapp, Ellen, Kincardine, and schooner Parana, tug Charlton, steambarges S. Sheppard, Oscoda, City of Mt. Clemens, propeller St. Magnus, D. W. Rust and consort, propeller China, tug Porter and schooners L. A. Law, John O'Neill.

Morning, down—Propeller Armenia, Wissahickon, schooners Schuylkill, Rival.

Afternoon—Tug Colton, barge Tacoma, propellers Starucca, Syracuse, tug Ballentine, steambarges Kalkaska, Queen of the West, propeller Juniata, steamoarge Kasota and consort, tug Crusader, steambarge Salina and four barges, Handy Boy.

DETROIT, Oct. 8.—Passed up, forenoon—Tug Park and schooner Mediterranean, steambarge Progress, Erin, Bay City and three barges, propeller Conestoga, tug M. Teller, Ella Smith and one barge, steambarge Wm. Cowie and two barges, A. A. Turner and three barges, V. Swain and consort.

Afternoon—Barge Superior, consort, and schooner S. H. Kimball, tug Torrent, propeller Philadelphia, tug A. Folger, schooner George Foote, John Rice, barge Leland.

Morning, down—Propeller W. A. Haskell, tug Beckwith and schooners A. P. Grover, Midland, Rover, steambarge V. H. Ketcham, propeller Nyack, tugs Moore, Winslow, schooners George, Belle Mitchell, Southwest, Torrent, barge Mackinaw.

Afternoon—Barges Juno, B. W. Arnold, Smith Moore, Colonial and consort, propeller St. Louis, tug Jessie, steambarge Sanilac, tug Oswego, schooners H. Fitzhugh, J. F. Card, barge Annie Smith, schooner J. C. King, Mineral Rock and three barges, tug Crawford.

DETROIT, Oct. 9.—Morning, up—Barge Morley, propeller Empire State, tug S. S. Rumage and barge Tim Baker, steambarge George Spencer and consort, Tempest and three barges, propeller Toledo, barge Point Abino, R. J. Hackett and consort, Kalkaska.

Afternoon—Tug Sweepstakes, propeller Dominion, tug Joseph Reid and schooner Charles Foster, barge Michigan and four barges, tug John Martin, schooners Florida and David Wagstaff, barges H. E. Packer, Fairbanks and consort, M. M. Drake.

Morning, down—Barge Nashua and consorts, tugs Champion, Wilcox, schooners C. H. Burton, Zach Chandler, Red, White and Blue, and M. Stalker, tug Sweepstakes and schooners D. E. Bailey, Unadilla, Canton, Monterey, barge John N. Glidden and consorts.

Afternoon—Propeller India, tug River Queen and schooners F. J. Danford, O. J. Hale, barge Forest City and consort, propeller Montana, barge E I Smith and four barges, D. Leuty and four barges, tug Porter and schooners Constitution and Smith and Post, barge M. Sicken and four barges, Siberia and consorts, steambarge E. B. Hale, and schooners Thomas Quayle, and Gulnair, Undine, propeller Missouri and three barges.

DETROIT, Oct. 10.—Passed up, morning—Tug Porter, steambarge Lowell and four barges, Fred McBrier and consort, tug Crusader, schooners Angus Smith and Nashua, Sumner and consort, steambarge J. H. Outhwaite, schooners Thos. Gawn, G. W. Davis, C. F. Curtis and three barges, R. Wallace and consort, tug Winslow and schooner M. S. Bacon, steambarge Keystone and consort, tug John Owen and schooners Michigan, Nicholson, steambarge Salina and four barges, H. C. Schnoor.

Afternoon—Propeller Boston, tug Park, schooner O. M. Bond, barges Mackinaw, H. S. Pickands, J E. Potts and one barge, Rhoda Stewart and four barges.

Morning, down—Tug Charlton, schooner Halsted, barge D. Ballentine and consort, tug Castle, schooners Itasca, A. L. Andrews, J. S. Richards, tug Swain, schooners H. P Baldwin, E. R. Williams, St. Louis, Owosco, D. S. Austin, propeller Lycoming, Lehigh.

Afternoon—Propeller Tioga, Rochester, steambarge Cleveland, two barges, schooner C. C. Crawford, tug John Martin, steambarge City of Cleveland and consort, Oscoda, propeller Idaho, steambarge John F. Eddy and consort, schooners M. J. Cummings, Venus, International and schooners John Kelderhouse, John Wesley, Arthur, Havana, barges Otego, schooner M. A. Muir.

PASSED PORT COLBORNE.

PORT COLBORNE, Oct. 7.—Passed up—Steambarge Erin, Kingston to Chicago.

Down—Steambarge W. B. Hall, Kingston to Duluth

PORT COLBORNE, Oct. 8.—Passed up—Schooner Willie Keller, Ogdensburg to Sandusky.

Down—Schooner Ella Murton, Erie to Hamilton; Watertown, Chicago to Kingston; propeller Armenia, Duluth to Montreal; Alma Monro, Duluth to Montreal.

PORT COLBORNE, Oct. 9.—Passed up—Schooners J. G. Worts, Wellers Bay to Cleveland; Jennie White, Oswego to Toledo; Severn, Trenton to Chicago.

Down—Schooner Mary Lyon, Chicago to Kingston; Kate Kelley, Detroit to Ogdensburg; Samana, Toledo to Ogdensburg; steambarge Lincoln and barge Lisgar, Chicago to Kingston; steamship W. A. Haskell, Chicago to Ogdensburg; propeller Armenia, Duluth to Montreal.

THROUGH THE SAULT.

SAULT STE MARIE, Oct. 7.—Morning, down—Steambarge Siberia, schooners Plymouth, Nelson Bloom, steambarge Escanaba, steambarge Forest City, schooners H. H. Brown, Ishpeming.

Afternoon—Steambarge W. H. Stevens, propeller B. W. Blanchard.

Afternoon, up—Steambarges New Orleans, S. F. Hodge, City of Rome, schooner Redwing, propeller Athabasca, steambarge W. L. Wetmore, schooner Brunette, steambarge S. J. Macy, schooners John Burt, Camden, propeller City of Montreal, schooner George Sherman, tug E. M. Peck, schooner Selkirk.

Arrived up, afternoon—Schooner J. E. Gilmore.

SAULT STE MARIE, Oct. 8.—Morning, down—Tug Mildred, schooner Conquest, propeller India, steambarge Minnesota, schooner Massasoit, steambarge Vienna, and schooner Verona, tug E. M. Peck, schooner Grace Holland.

Afternoon—Steambarge Wocoken, propeller United Empire, steambarge Continental, schooner Magnetic, propeller Idaho, steambarge Iron Chief, schooner Iron State.

Morning, up—Steambarge Henry Chisholm, schooner Alva Bradley, steambarge Wallula, tug Constitution, schooners C. H. Johnson, Horner.

Afternoon—Propellers Arctic, and R. A. Packer, steambarge Minneapolis, schooner Wm. McGregor, steambarge Sparta, schooners Sumatra, L. Hanna, steambarge Fred Kelley, schooners Queen City, M. R. Warner, steambarge Columbia, schooners Comrade, Jura, steambarge Havana, schooners Genoa, Helena.

SAULT STE MARIE, Oct. 9.—Forenoon, down—Steambarge Alcona, schooner Alta, tug E. M. Peck, schooner Laketon, steambarge Alpena, propeller Onoko.

Afternoon—Propeller Winslow, steambarge S. E. Sheldon, schooner S. P. Ely, steambarge Rhoda Emily, schooner Guiding Star.

Morning, up—Steambarge Wm. Chisholm, propellers City of Owen Sound, Cuba, and schooner Donaldson.

Afternoon—Tug Mystic, schooner Saveland, propellers Fountain City, James Pickands, tug A. J. Smith, schooners Annie Vought, W. L. Peck, R. N. Rice, Autonto, propeller Acadia, steambarge D. M. Wilson, schooner Manitowoc, Chester B Jones, steambarge Nipigon, schooners Middlesex, Melbourne, Eureka, schooner J. E. Gilmore.

Cleared—down, forenoon—Propeller Pacific.

SAULT STE MARIE, Oct. 10.—Morning, down—Steambarges Russia, Republic, schooners Jas. Crouch, Grace Holland, propeller Jas. Fisk, Jr., steambarge C. H. Green, schooners Mattie C. Bell, Rosa Sonsmith, steambarge Waldo A. Avery, schooner H. A. Hawgood.

Afternoon—Propellers St. Paul, Athabasca, steambarge Minneapolis, schooner Wm. McGregor, propeller Joseph L. Hurd, steambarge Business, and schooner Kate Winslow.

Morning, up—Propellers Cuba, Alberta, Peerless.

Afternoon—Steambarge Porter Chamberlain, Ida Corning, A. T. Bliss, steambarge Cormorant, schooner Richard Winslow, and steambarge Simon Langell, schooners S. M. Stevenson, F. M. Knapp, propeller Empire State, steambarge V. Swain, schooner Helvetia.

Arrived—up, afternoon Schooner Eliza Gerlach.

THROUGH THE STRAITS.

MACKINAW CITY, Oct. 7.—Morning, down—Schooner Narragansett, John N. Glidden with schooners Fred A. Morse and G. H. Warmington.

Afternoon—Schooners Arthur, propeller Conemaugh, schooner M. A. Muir.

Morning, up—Propeller City of Grand Rapids, schooners Our Son, Hattie Wells, propeller Commodore.

Afternoon—Propeller Delaware.

MACKINAW CITY, Oct. 8.—Morning, down—Propeller Syracuse, D. Ballentine, schooner Northwest, schooner John Miner, propeller Wm. H. Barnum.

Afternoon—Schooner Planet.

Morning, up—Schooner Comanche, propeller T. S. Faxton, schooner Higgie and Pensaukee, propeller Gordon Campbell and schooners Annie Sherwood and Allegheny, schooner J. I. Case, George.

Afternoon—Propellers Buffalo, and New York.

MACKINAW CITY, Oct. 9.—Morning, down—Propeller Rochester, Yosemite and consort, Tioga, A. Weston and two barges' schooner Ida Keith, E. P. Beals, Louie A. Burton and Fanny Campbell.

Afternoon—Propeller Iron Age, Jim Sheriffs with schooner Pathfinder, Dean Richmond, T. H. Faxton.

Morning, up—Propeller City of Grand Rapids, Milwaukee.

Afternoon—Propeller Progresss, D. W. Rust with schooners L. C. Butts and D. K. Clint, propellers C. J. Kershaw, Philadelphia.

MACKINAW CITY, Oct. 10.—Morning, down—Schooner Geo. M. Case, C. C. Barnes, propeller Arabia.

Afternoon—Propeller Vanderbilt, T. S. Christie with schooner H. A. Kent.

Morning, up—Schooner Jas. D. Sawyer, propeller Avon, schooner Belle Brown, Marengo, A. Boody, Ellen Spry, Daniel G. Fort, Swallow, City of Sheboygan.

Afternoon—Schooner I. N. Foster, propeller Grand Traverse.

[Continued on 4th page.]

NEW LINE MOVEMENTS.

The Vermont Central railroad company, which operates a line of steamers between Chicago and Ogdensburg, is negotiating for the purchase of the steamers Russell Sage, J. C. Gault, and A. L. Hopkins. These boats are owned by the Wabash railroad company, and are at present running between Toledo and Buffalo. Their combined value, as set down in the insurance register, is $206,000. Some months ago, when the boats were in the hands of a receiver, they were offered to the Vermont Central company for $175,000, but just as the sale was about to be closed the company backed out and decided not to take them. Now the company is anxious to get the boats, but the Wabash people are asking $190,000. It is said that the sale is likely to be consummated in a day or two. It is also announced that the Vermont Central will make some extensive changes in its line at the beginning of next season. The most important will be the establishing of a line of steamers between Chicago and Owen Sound. This line is to be composed of the steamers Walter L. Frost, W. J. Averill, W. A. Haskell and two others, probably the Pacific and the John Pridgeon, Jr. Large warehouses are to be erected at Chicago and Owen Sound on water frontage that has already been secured. The boats will carry grain and merchandise from Chicago to Owen Sound, where they will connect with the Canadian Pacific railroad. Their cargoes will then go by rail through Canada to Ogdensburg, thence over the Vermont Central railroad into New England. This innovation, however, will not cause the water route between Chicago and Ogdensburg to be abandoned, as the company has made a contract for the construction of two new steel steamers, and these, together with the Wabash boats, if purchased, will run on the present route through the Welland canal.

HASTENING CLEVELAND'S IRON SUPREMACY.

Recently Mr. J. H. Sargent, a well known and highly respected veteran engineer of Cleveland, outlined a project upon which he has bestowed much study, looking to the utilization of the lake front on the western outskirts of Cleveland for manufacturing purposes. Briefly, his scheme is this:

Construct a belt line road connecting with all the leading railroads and terminating in a triangular piece of land, west of the city, having a lake frontage of about 1¼ miles. To recover this land, which for ages has been encroached upon by the lake, he would build a breakwater in from 18 to 20 feet of water, and about 7,000 feet long. The cost of these several parts of the main project he roughly estimates as follows:

Cost of belt line railway, 10 miles	$400 000
Cos of breakwater	400.000
Cost of filling docks	400,000
Cost of land	100,000
Contingencies	200,000
Total	$1,500,000

These improvements completed, he would have a ship channel, entirely isolated, free from floods, or shoals, or running ice, a mile and a quarter long, 300 or 400 feet wide, and 16 to 18 feet deep, as accessible to the shipping of the lake as the Harbor of Refuge now is. Between this channel and the Belt Line Road would be a strip of land 1,000 or 1,200 feet wide, with 7,000 feet front upon both. Between the Belt Line and Lake Shore & Michigan Southern roads there would be 100 acres more of land.

Asked what he would do with these facilities after he had them, he replied: "Let us erect a plant of blast furnaces and converters along side a slip from the ship channel a thousand feet long, sufficient to turn out a thousand tons of steel daily, these furnace would consume 1600 tons of ore daily as fast as it could be taken from the ships, so the ore might be taken from the ships to the furnace tops; so with the limestone brought by water direct from the quarry to the furnace, and on the opposite side of the slip might be the stock piles for winter's use. Now as to fuel; let the coal be brought to the hundred acre purchase and coked there, saving the gas for heating and finishing purposes. This would be on the upper plain, and the coke might be transferred direct from the ovens to the furnaces. This property would be free from all public streets and thoroughfares. The steel would pass right on to the plate, bar and rail mills, the plates and rails passing on to ship yards, shipping and railways with the minimum amount of handling. This provides for consuming annually a half million tons of ore and a half million tons of coal right here on a water channel free from all other business of the city—from all draw bridges and complicating interests. If you make your own gas, the disturbing question of natural gas is eliminated. The matter of filling the docks will be largely done by the works themselves."

We understand Mr. Sargent is in communication with several leading capitalists in regard to carrying out the project, in which, however, he cannot himself take any active part.—*Iron Trade Review.*

The creditors of the shipbuilding firms of Goss & Sawyer, and Goss, Sawyer & Packard, met in Bath, Me., recently, in response to a circular from the board of trustees empowered to handle the property of these insolvent firms Eighteen months were given the trustees to realize on the assets sufficient to settle the claims. That time has now expired, but, owing to business depression, the affairs are in no better condition than they were when the failure occurred, and the creditors have refused further time. The liabilities are $410,000; assets nominal, $417,000. The assets will be materially diminished in a forced conversion into cash. The New England shipbuilding company occupies the plant of the insolvent firms.—*New York Nautical Gazette.*

There is talk of putting the propellers Arabia and Tioga in the Lake Superior Transit line next year. The sale of some vessels now in the line and offered for sale would be likely to bring this about. These two vessels can easily put on passenger cabins. In fact, the Tioga was built with that view.

Captain S. B. Grummond has bought a pretty little wooded island known as "The Snows" about fifteen miles north of Mackinaw island, presumably for a park for the purpose of pleasure. It is said that he will build a club house on the property.

MURPHY & ROOT,

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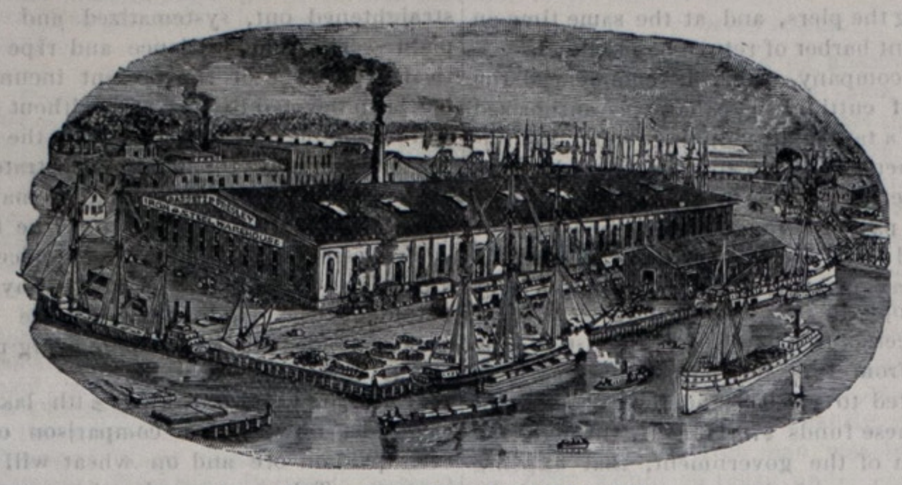

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23 River street, Cleveland, Ohio.

OFFICIAL NUMBERS AND SIGNAL LETTERS.

TREASURY DEPARTMENT, BUREAU OF NAVIGATION, WASHINGTON, Oct. 4, 1886

To the Editor of the Marine Record:

Following is a list of merchant vessels of the United States to which official numbers and signal letters were assigned by the Bureau of Navigation, Treasury Department, during the week ended Oct. 2, 1886:

Official Number.	Signal Letters.	Rig.	Name of Vessel.	Tonnage. Gross.	Net.	Home Port.
			SAIL VESSELS.			
126,388	.....	Sl.	Charles R. Smith,	15.33	14.46	Pachogue, N. Y.
135,903	.....	Sc.	Ethel Jerrell,	24.42	23.20	.....
135,904	.....	Lug	Eagel,	8.93	8.48	New Orleans, La.
135,907	.....	Sc.	Emma Estelle,	37 88	35.99	Baltimore, Md.
120,655	.....	Sc.	F. L. Lovell,	5.98	5.70	St. George, Me
85,940	.....	Sl.	Growler,	9.22	8.76	Patchogue, N. Y.
85,941	.....	Sc.	Georgia,	10 30	9 78	Baltimore, Md.
85,942	.....	Sc.	Gertrude.	7.81	7.42	Bridgeton, N. J.
100,401	.....	Sc.	Isaac T. Parks,	10.44	9.92	Crisfield, Md.
140,843	.....	Sc.	Lillie Estelle,	10.53	9.97	Baltimore, Md.
140,844	.....	Sc.	Lola Taylor,	10.27	9.76	do do
91,876	.....	Sl.	Messenger,	6.40	6.08	Gloucester, Mass.
130,360	.....	Sl.	Nellie Clapp,	6.60	9.21	Sedgwick, Me.
150,385	.....	Sc.	Puritan,	15.76	14 98	Crisfield, Md.
91,132	.....	Sl.	Wm M. Britiain,	10.95	10.40	Norfolk, Va.
			STEAM VESSELS.			
106,443	K D N C	St. s.	Alliante.	2985 18	2105.38	New York, N. Y.
157,181	.....	St. p.	Dauntless,	15.77	11.57	Terre Haute, Ind.
135,905	.....	St. s.	Enterprise,	13.84	10 07	Wilmington, N. C.
135,906	.....	St. s.	Edith E.,	21.88	11.80	Houghton, Wash.
120,654	.....	St. s.	F E. Spinner,	1003.19	777 57	Chicago, Ill.
95,893	.....	St s.	Helen,	15 93	7.97	Town Creek, Md.
140,845	.....	St s,	Loreto,	19.86	9.93	New York, N. Y.
130,359	.....	St. p.	Nellie Hudson,	213 31	166 01	Pittsburg, Pa.
116,121	.....	St. p.	Stella Wilds,	289.12	288.12	Wheeling, W. Va.
161,560	.....	St. s.	Veronica	1093.02	880.70	Milwaukee, Wis.

JARVIS PATTEN, Commissioner of Navigation.

LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, May 30, 1886 at 5 o'clock p. m the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4. Fast Limited Express.....	*2 55 A M	*3 05 A M
No 8, N Y, B & A Express.....	*8 25 A M	*8 50 A M
No 26, Elyria Accommodation.....	†7 45 A M	.....
No 24, Buffalo Ac'm via Sandusky	†10 30 A M	†10 45 A M
No 24, Toledo Accom via Norwalk	†10 30 A M	†10 45 A M
No. 10, New York & Boston Ex..	*11 40 A M	*12 noon
No 12, N Y & B Fast Express.....	*2 10 P M	*2 45 P M
No 2, Night Ex via Norwalk.....	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky...	†9 40 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express.....	*12 15 A M	*12 25 A M
No. 23 Cleveland Express.....	*2 15 A M	
No 3, Chicago Express via " ..	‡6 00 A M	6 30 A M
No 25, Mich Accom Norwalk.....	.....	†6 30 A M
No 21, Toledo Ex via Norwalk...	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky..	*10 45 A M	*10 50 A M
No 9, Chi Pac Ex via Norwalk.....	*6 15 P M	*6 40 P M
No 31, Elyria ac to Elyria only...	.....	†4 30 P M
No 27. Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 8:15 a. m. and 1:45 p. m.; returning, leave Nottingham at 8:50 a. m. and 3:45 p. m.

Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.

A local Cleveland and New York sleeper daily on No. 12, leaving Cleveland at 2.45 p. m.; arrive Grand Central depot, New York, 10.30 a. m.

For full information as to trains and counections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

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Trains leave and arrive at the Union Depot, Van Buren street, Chicago, and N Y, L E & W R'y depot at Buffalo.

Following is the time in effect April 25, 1886, and until further notice:

EASTWARD.	Arrive.	Depart.
Buffalo Passenger	*10 40 A M	*10 45 A M
Chicago Passenger.....	*9 00 P M	.....
Local Freight.....	* 4 40 A M	* 5 45 P M
WESTWARD.	Arrive.	Depart.
Chicago Passenger	.....	*6 45 A M
Fostoria Pascenger	*4 46 P M	*4 51 P M
Local Freight.....	* 5 00 P M	* 5 50 P M

ROCKY RIVER ACCOMMODATION.

Depart—*7:40 a. m., *1:35 p. m.

EUCLID ACCOMMODATION.

Depart—*6 24 a. m., *9:10 a. m,. *5:05 p. m.

*Daily except Sunday.

Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of tickets desired. Baggage checked to destination

For information, call on nearest agent of the Company, or address B. F. HORNER, Gen'l Passenger Agent,

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Steel hull 60 feet over all, 10 feet beam, 6 feet hold. Engines fore and aft compound, 8 and 14x12. Otis steel boiler, return flue, 110 pressure. Complete passenger outfit for forty-three passengers. Speed 12 to 16 miles. H. F. LOOMIS, 151 Arlington-st, Cleveland.

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This tug is 52 feet over all, 13 feet 3 inches beam, and 6 feet 6 inches depth of hold. Engine, 13x14; steel boiler 4 feet 6 inches diameter by 9 feet long. The hull was built by Geo. H. Notter, Buffalo, and is an excellent model and well built. The tug is nearly new, having done only five month's work since she came out new last summer. She has a poop deck and finished cabin fore and aft, and classes A1. Price, $4,300. Address MARINE RECORD OFFICE.

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Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

A. A. POMEROY, EDITOR AND PROP'R

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Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, OHIO, THURSDAY, OCTOBER 14.

THE PORTAGE LAKE SHIP CANAL

In accordance with a recommendation made by General O. M. Poe in his last annual report, congress, at its last session, took certain steps toward deciding the advisability of the government purchasing the Portage Lake and River Improvement Company's canal, and making it free of toll. Following is an extract from the river and harbor act, approved August 5, 1886, bearing on the measure:

"The secretary of war is authorized and directed to appoint a board of three engineers from the United States army, whose duty it shall be to examine, in all their relations to commerce, the two improved waterways, known as the Portage Lake and River Improvement Company canal and the Lake Superior Ship canal Railway and Iron Company canal, being the improved harbors of refuge and the water communication across Keweenaw Point, from Keweenaw Bay to Lake Superior, by way of Portage river and lake, in the state of Michigan, with a view to making the same a free passageway and harbors of refuge; to consider their value and all other matters connected with their usefulness to navigation, and which shall give information as to the expediency of the work and the desirability of their acquisition and improvement. The said board shall report to the secretary of war, who shall lay its report before congress at its next session, together with the views of himself and the chief of engineers of the United States army thereon; and ten thousand dollars, or so much thereof as may be necessary, is hereby appropriated for this purpose."

The board of engineers, provided for by the above extract, has been appointed, and it consists of General H. L. Abbott, Major O. H. Ernst, and Major C. J. Allen. The board will meet on the 16th of October next, to examine in their relations to commerce, the two improved waterways mentioned, they being the improved harbors of refuge and the water communication across Keweenaw Point from Keweenaw Bay to Lake Superior. The board is to consider their value and all other matters connected with their usefulness to navigation that will give information as to the desirability of their acquisition by the United States.

It is not premature to say that the engineer officers in charge of this work will find much that is in favor of the government acquiring these artificial waterways, and to that end report to congress at its next session. This object, if properly followed up, will be conducive of great benefits, not only to lake navigation generally, but to the people of all the upper peninsula towns and the immense mining and agricultural interests of the Lake Superior region. The Portage canal, which was constructed by a private corporation, has been tendered to the government for $350,000, a nominal sum, its original cost being $3,925,300. The construction of the Portage canal was begun in 1868 by the company, by dredging at the south end of the river and the work followed up year by year until 1873, when it was enlarged, the upper or north end of the river, about six miles from Houghton, being opened up by cutting through a sand hill and kept in comparatively good shape by driving piles, although the mouth of the cut required almost constant attention on account of the light, drifting sand, dredges being used to maintain the required depth of water for the accommodation of commerce. This evil, it is possible, can be remedied at once in case the canal comes into possession of the government, by extending the piers, and at the same time an excellent harbor of retuge be obtained.

The company, when it commenced the work of cutting the canal, was authorized to levy a tax on all shipping using the improvement, and the toll was placed at two cents per ton, beside a tax on all freight which passed through it destined for, or shipped from, the Portage Lake district, the latter tax making the cost of supplies for the people in that region quite a burden. The receipts from tolls for the use of the canal from 1874 to 1883, inclusive, have amounted to $75,053 and the expenditures from these funds $70,146. If, through the medium of the government, that expense can be removed from the commerce of the lakes, much good will be done and the country benefited.

It is acknowledged that the canal in question is one of the most practical in the country, being but a trifle over two miles in length and one hundred feet wide, with t present, a depth of twelve to fourteen feet. This short artificial waterway saves many hours between Lake Superior and Keweenaw Bay, and enables mariners to avoid rounding the stormy shores of Keweenaw Point and the outlying islands. Therefore, it will be seen that if the ownership of this important and practical waterway, clear of all incumbrance, can be vested in the government and the tolls removed for the benefit of navigation, and the canal improved to make a good harbor of refuge, and deepened sufficiently to correspond with the water at the St. Mary's canal, our system of navigation will be free of tolls from the head of Lake Superior to the Hudson, via the Erie canal, about 1,400 miles of inland navigation. Why then, is it not eminently proper for the government to foster this great interest in every way possible? We do not hesitate to say that the board of engineers to convene at Houghton next Saturday will, after due deliberation, report to the secretary of war that it will be expedient for the government to acquire the canal, as it is of value and useful.

STURGEON BAY AND LAKE MICHIGAN CANAL.

The board of engineers constituted in obedence to a provision contained in the river and harbor bill, approved August 5th inst., convene publicly at 366 Milwaukee street, Milwaukee Wis., on the 21st inst. and invitations are extended by Captain Marshall, in charge, for lake men interested in the matter of making the Sturgeon Bay and Lake Michigan canal free of tolls, to lay facts and views before the board, in writing. It is also the purpose of the government, if a favorable report can be had, to purchase the canal, enlarge it, make it free of toll and make it a harbor of refuge. This is a matter of much importance to vessel owners, especially to those trading from Green Bay to Lake Michigan ports, and should receive the attention it deserves. It is true that the Sturgeon Bay canal is not of the national importance that attaches to the Portage lake ship canal, but it should be the policy of the government to acquire control of all the short canals connecting different bodies of water with the lakes and make them free of toll. The toll now exacted from vessels trading through the canal is quite a burden during a season, being 3½ cents per ton, and should be lifted. By the use of the canal a distance of from eighty to one hundred miles is saved, which is of great moment during a busy season like the present, and by enlarging and protecting the Lake Michigan entrance a good harbor of refuge can be made. We trust full and explicit views on the matter from vessel men will reach the board of engineers by the 21st, accompanied by facts that will enable the board to make a report favorable to the project.

THE BUREAU OF NAVIGATIO N

It is rumored that the politicians are after the bureau of navigation. If there is one department of this government that should be protected from the machinations of the politicians that one is the newly constituted bureau of navigation. The office of commissioner of navigation was not made as a political sinecure, but to fill a want in our system of navigation that has long been felt and peremptorily demanded. The present commissioner of navigation, Captain Jarvis Patten, has never been a politician but a ship owner and master, and his fitness to fill the office with ability has been exemplified time and again, especially in the publication of his last annual report, in which he put before the public a volume of the most valuable statistics, closing the report of the fiscal year six months earlier than has been done by the correspouding bureau under any other government. When Captain Patten took charge of the bureau of navigation all matter relating to that great interest was in a chaotic condition. But in two years it has been straightened out, systematized and made plain. The time, patience and ripe practical experience of the present incumbent has been devoted to this end without stint, and he should now be retained in the office so that he may further demonstrate the utility of the new bureau, that he may extract other matter of value from the mass. This is essentially a shipowner's office, not a politician's, and we venture to say that President Cleveland will recognize it as such and object to any change being made.

It appears that ore is king with lake carriers just now, and a comparison of the rates paid on ore and on wheat will be of interest. Take two vessels with a capacity for 50,000 bushels of wheat or 1,500 tons of ore each, and without computing the cost of handling, the one loading wheat at Duluth at 7c per bushel, the other ore at Washburn at $2.60 per ton, and the ore-laden vessel will earn $3,900 in less time than the wheat-laden vessel is earning $3,500. Again, the ore-laden vessel will earn $3,000 from Marquette in less time than the Chicago grain-laden vessel will earn $2,500. The difference in the expense of handling is largely in favor of the ore vessel, the cost of handling wh at being as follows:

Chartering, per 1,000 bushels	.50
Weighing in " "	.20
Trimming " "	$1.50
Weighing out " "	.20
Use of steamshovel per 1000 bu	4.00
Elevating " "	1.50
Total	7.90

In addition to this the expense and time attaching to the extra run on Lake Erie, about 175 miles, to Buffalo, must be computed. The cost of handling ore is but about 21 cents per ton for weighing in and out, and that of chartering, which ranges between $10 and $15 per cargo. This shows a net earning for the ore carrier of $3,570, and for the grain carrier of $3,105.

ACTION ON THE PORTAGE CANAL.

CLEVELAND VESSEL OWNERS' ASSSCIATION.

At the meeting of the Vessel Owners' Association, the following resolutions, drawn by H. D. Goulder, Esq., were adopted:

Whereas, The opening of extensive iron mines about the upper end of Lake Superior, and the rapid settlement of the great Northwest and its development by railroads leading to the western end of Lake Superior, have, in recent years, vastly increased the lake commerce between the upper end of Lake Superior and the East, as shown in the immense shipments of iron ore and grain from that section, and the increased demand for coal at the Lake Superior ports, which increase will undoubtedly be continuous; and,

Whereas, The building of the great number of vessels of the largest class which are now under contract for construction during the coming winter, is for the most part to care for this increased traffic with the upper end of Lake Superior; and,

Whereas, About Point Keweenaw in the spring and fall the weather is almost constantly stormy, subjecting vessels navigating past that point to great danger, and to tedious and costly delays; and,

Whereas, There is no place of refuge above Point Keweenaw for a distance of 175 miles,

Resolved, By the Cleveland Vessel Owners' Association as a body, that it is of the utmost importance that the government obtain control of the Portage Lake Ship Canal and improve and deepen the same to at least twenty feet, and establish at the upper or western end a harbor of refuge and make the whole free to commerce.

Resolved. That with sufficient depth of water to accommodate deeply laden vessels the canal would be used to the greatest advantage by through commerce, saving greatly in distance and also saving, in bad wether, the dangerous and tedious navigation around Point Keweenaw, besides very often avoiding long delays for wether to attempt the passing of the point.

Resolved, That by such improvement any proposed harbor of refuge near the end of Point Keweenaw would be unnecessary and not desirable.

Resolved, That in any sense such ownership, improvement, and use of the canal by the general government is a matter of truly national interest—the benefits and influence being mainly to through commerce of the Northwest with the East and the eastern seaboard.

Representative M. A. Foran, who was present at the meeting of the Vessel Owners' Association, spoke in a general way of the pressure brought to bear on the river and harbor appropriation bill. He said the great struggle is between the several sections of the country for local improvements. The energies of the Illinois and Iowa congressmen are directed toward the Hennepin canal scheme, which I consider the biggest fraud ever perpetrated on the government. Next comes the men on both sides of the Mississippi river, from its head to its mouth. In their estimation that stream is the center on which the commerce of the country works. Go south and you find that the whole Texas delegation is interested in the improvement of Galveston harbor. Then come the people of the east, who think the improvements of New York harbor of most importance. All these factions brought pressure to bear on the committee having charge of the river and harbor bill, and in addition there were several other large appropriations wanted for which immense pressure was brought. Just such improvements as we want now fell through for want of concentrated effort. The only way such matters can be accomplishad is by organization. There are members of congress enough on these lakes to obtain appropriations for this or like improvements, but their efforts must be united."

At the close of the session of the Vessel Owners' Association, the Board of Trade was called to order by President Edwards and the above resolutions read and action requested thereon by that body. The resolutions were referred to the committee on legislation which reported the following resolution:

Your committee, having considered the resolutions of the Vessel Owners' Association of this city, recommend the passage by your board the following resolution:

Resolved, That the resolutions adopted by the Vessel Owners' Association for this improvement seems to us of the greatest importance, and we cordailly endorse their recommendation. In the opinion of this Board this improvement is one of national importance and one that Congress should promptly provide for.

HARVEY D. GOULDER,
LEE MCBRIDE,
C. B. LOCKWOOD,
C. A. MUERMAN,
H. S. WHITTLESEY.
Committe on Legislation.

X. X. CRUM, Sec'y.
Oct. 13, 1886.

LAKE CARRIERS' ASSOCIATION.

Special to Marine Record

BUFFALO, October 12, 1886.

At a meeting of the Board of Managers of the Lake Carriers' Association, held at Buffalo this date, the following resolution was adopted:

Whereas, The canals through Keweenaw Point, Lake Superior, known as the Lake Superior Ship Canal Railway and Iron Co, Canal, and the Portage Lake and River Improvement Co. Canal, can now be purchased by the United States free from all encumbrances, for about one-tenth of their original cost of construction, and

Whereas, These canals are of great advantage to the commerce of Lake Superior, enabling vessels to avoid the dangerous passage around Keweenaw Point; and afford a material saving in distance to the coasting trade, and

Whereas, These canals furnish opportunities for very valuable harbors of refuge, on either side of Keeweenaw Point, at moderate expense.

Resolved, That the Board of Managers of the Lake Carriers' Association consider it eminently desirable and proper that the United States should purchase these canals with a view to improving the same and making them a free passage way and harbor of refuge.

FRANCIS ALMY, Sec'y.

A communication from Cleveland was read, calling the attention of the Association to the suggested purchase by the United States of the Sturgeon Bay and Lake Michigan Ship Canal, connecting the waters of Green Bay and Lake Michigan. It was referred to Vice President W. M. Egan, of Chicago.

Mr. E. T. Evans. Captain W. P. Henry, and Captain John Green were appointed a committee to examine into the advisability of requesting the government to establish fog horn and whistle at Buffalo, or at the outer light house.

OBITUARY.

CAPTAIN JOHN SINCLAIR, JR.

Captain C. H. Sinclair was summoned to Port Huron last week to attend the deathbead of his aged father, who died of paralysis. The deceased was Captain John Sinclair, Jr., a retired vessel master. He was eighty-three years of age. All of the old lake captains who were in active service a quarter of a century ago remembered him as master and owner of some of the finest sailing vessels that were on the lakes at that time. Captain Sinclair came to the lakes in 1843. Among other vessels that he owned and sailed was the schooner Niagara, which went to pieces at Muskegon in 1858. Near the close of the war he gave up sailing and was appointed lighthouse keeper at Port Gratiot, Mich., where he remained for many years. Captain Sinclair was father of nine children, one girl and eight boys. The boys all became masters of vessels. The family was a remarkably healthy one, and when the captain and the Scotch lassie who became his bride fifty years before celebrated their

golden wedding, death had never crossed their threshold. The next day one of the sons, who was sailing as mate on the schooner Zach Chandler, was lost overboard. Shortly after the captain lost his wife, who died in 1880, at the age of seventy-four. Eight children, ranging from sixty to forty years of age, are still alive. John is light-keeper on Thunder Bay Island, Thomas is a salt manufacturer at Port Crescent, Mich., James owns an orange grove in Florida, Daniel is master of the schooner Tyson, Aleck is master of the steambarge Oscoda, Lawrence is master of the barge W. W. Stewart, and Cyrus was recently appointed government inspector of hulls at Chicago.

GEORGE KING.

George King, a well known shipbuilder and vessel owner of Marine City, Mich., was run over by a locomotive on the docks at Fairport at noon Monday and instantly killed. He was interested in several vessels, being half owner of the schooner Teutonia, which vessel he had just left when stricken down. His remains passed through Cleveland on the way to Marine City. Among the vessels built by Mr. King are the propeller Marine City, 865 tons; the barge C. K. Jackson, 400 tons; propeller George King, 533 tons; propeller Pickup, 106 tons; propeller D. F. Rose 259 tons; barge Teutonia, 594 tons; schooner Charles M. Weeks, 342 tons; barge C. L. Young, 382 tons.

[*Vessel Passages Continued from 3d Page.*]

PASSED DETROIT.

DETROIT, Oct. 11.—Passed up, morning—Tug Charlton, steambarge J. H. Devereux and schooner H. J. Webb, Clyde, J. S. Fay and schooners D. P. Rhodes, S. J. Tilden, tug Samson and schooners E C. Hutchinson, S. L. Watson, barge Queen of the West, propeller H. J. Jewett, tug Wales and consort.

Afternoon—Tug Swain, schooner American Union, Colton and schooners Porter, Maria Martin, propellers Syracuse, Alaska.

Morning, down—Barge Alcona and consort, Canisteo, Lothair and consort, propeller Dean Richmond, barge Continenta. and consort, Westford and three barges-Columbia and consort, schooner Jura, barge Iron Chief and consort.

Afternoon—Steambarge Maine and three barges, Fred Mercur, propeller Annie Young, barge Nevada, Yosemite and two barges, propeller Russia.

DETROIT, Oct. 12—Passed up, morning—Tug Gladiator and schooners John B. Merrill, Oliver Mitchell, propeller Osceola, tug Champion and schooners Moonlight, Golden Fleece, Wm. Home, tug Park and schooners Montana, Belle Hanscomb, steambarge C. Hurlbut and consort, tug International and schooners W. H. Rounds, L. Seaton, tug Oswego and schooners Reed Case, N. C. West, Hartford, steambarge Oscoda, tug Castle, and schooners H. M. Scove, Midland Rover.

Afternoon—Steambarges Schoolcraft, Colonial and consort, Wm. B. Hall, Iron Age.

Morning, down—Steambarges Veronica, Schoolcraft and raft, tug Torrent and raft, propeller Birckhead and three barges, C. H. Green and consort, propeller W. L. Frost, steambarge Republic and consorts, steamer T. S. Christie and schooner H. A. Kent, propeller Newburg, tug M. Teller.

Afternoon—Tug M. Swain, steamer Waldo Avery and consort, tug Ballentine and schooner M. L. Breck, steambarge S. Shepard propeller Saginaw Valley, tug Sweepstakes and schooners C. C. Barnes, Geo. M. Case, Planet.

THROUGH THE SAULT.

SAULT STE MARIE, Oct. 11.—Morning, down—Steambarge Kittie M. Forbes, schooner Mabel Wilson, steambarge D. C. Whitney, schooner Ashland, propellers Wisconsin, Arizona, Japan, Ontario.

Forenoon, up—Steambarge Superior, and schooner S. H. Kimball, steambarges H. E. Packer, R. J. Hackett, schooner Susan E. Peck, propeller M. M. Drake.

Afternoon—Steambarge George Spencer, schooner David Dows, propeller Nipigon, schooner Pride of America, propeller Badger State, steambarge Escanaba, schooner Thomas P. Sheldon, with 1,100 tons of railroad iron.

SAULT STE MARIE, Oct. 12.—Morning, down Propeller City of Duluth, steambarge Hecla, schooner Nellie Redington, steambarge New Orleans, schooner Ed Kelley, propeller Jay Gould.

Afternoon—Steambarge Egyptian, schooners Pelican, Charles Wall, propeller Campana, steambarge Bessemer, schooner David Vance, steambarge Clinton, and schooner Grimsby, tug Mystic, Thomas L. Parker, steambarge J. P. Donaldson, and schooners Nellie Mason, Brightie.

Morning, up—Tug E. M. Peck, schooner Colonel Cook, propeller Canada.

Afternoon—Propeller St. Magnus, steambarge N. K. Fairbanks, schooner B. F. Bruce, Dominion, steambarge Bruno, and schooner Laura, propeller Toledo.

Arrived up, afternoon—Schooner J. C. Cahoon.

The steambarge Bessemer, with her tow, arrived down to-day with loose crank-pin. It is doubtful if it can be repaired here.

THROUGH THE STRAITS.

MACKINAW CITY, Oct. 11.—Morning, down—Schooner Typo.

Afternoon—Schooner Ottawa, propeller Monteagle, schooners White Star, Mystic Star.

Morning, up—Schooner G. G. Houghton, propeller Waverly.

Afternoon—Tug James Reid, schooner F. C. Leighton, propeller Boston.

MACKINAW CITY, Oct. 12.—Morning, down—Schooner Commerce, and propeller Huron City and two barges.

Afternoon—Schooner Lotus, propeller Hiawatha and two consorts.

Morning, up—Schooner Cheney Ames, propeller City of Grand Rapids, Curtis and three barges.

Afternoon—H. J. Jewett, Clyde, schooner John O'Neill, tug John Owen with schooners Michigan and Nicholson, propeller Albany.

PASSED PORT COLBORNE.

PORT COLBORNE, Oct. 11.—Passed up—Schooner John Magee, Oswego to Toledo; W. H. Oades, Oswego to Detroit; propeller John Pridgeon, Jr., Ogdensburg to Chicago.

Down—Schooner F. D. Barker, Milwaukee to Oswego; W. R. Taylor, Toledo to Kingston; barges Sherman and Miles, Chicago to Ogdensburg; steambarge Tecmseh and consort, Toledo to Ogdensburg.

PORT COLBORNE, Oct. 12.—Passed up—Schooner Wawanosh, Weller's Bay to Cleveland; propeller Armenia, Kingston to Cleveland; steamship W. J. Averill, Ogdensburg to Chicago.

Down—Schooner Blazing Star, Detroit to Oswego; Mary Copley, Detroit to Cape Vincent; West Side, Detroit to Ogdensburg; Hoboken, Detroit to Oswego; A. L. Andrews, Chicago.

[*Around the Lakes Continued from 1st Page.*]

DETROIT.

The Greyhound will make her regular trips to Port Huron until further notice. The Star line does not accept the steamer Cole's return tickets, nor does the Cole land at Star Island. The steamer Mascotte has taken the place of the Saginaw on the Toledo route and until further notice will leave on Tuesdays, Thursdays and Saturdays.

The steamer Saginaw has closed a successful season's business in Toledo and departed for Detroit. It is understood that the Star line people intend to have her rebuilt this winter and that when she comes out next season she will resemble in appearance the Greyhound. The work is to be done by the Detroit drydock company, who guarantee to increase her speed two miles an hour.

The propeller T. W. Palmer received a new bed plate at the Detroit drydock.

The schooner Niagara has been seized on a claim by Detroit parties coming from the collision with the tug Sweepstakes and the tug International.

The Vermont Central railroad officials are negotiating with the Detroit drydock company with the view of building two composite steamers, to cost $150,000 each.

The tug McArthur, of Kingston, the two-pipe Canadian wrecker will be stationed at Windsor.

Captain Chas E. Kirtland, of Cheboygan a noted wrecking master on the lakes, has made arrangements with Captain S. B. Grummond of Detroit, by which he will have control of the latter's wrecking outfit, which consists of tugs, steam pumps, large lighter, and hoisting apparatus, etc. Captain Kirtland's headquarters will be located at Mackinaw City, and probably the tug Winslow will be located at Cheboygan. This makes a strong wrecking combination.

The Detroit drydock company will soon begin work on a steel steamship that will be one-third larger than the largest vessel on the lakes, not excepting the new Anchor line steamship Susquehanna. It is designed to carry 4,500 tons of freight, or 150,000. bushels of wheat, and will cost not less than $300,000. Frank E. Kirby, constructing engineer for the company, is preparing the plans and specifications, and expects to have the model ready before the close of navigation. Mr. Kirby, went to Europe about two months ago for the express purpose of studying modern designs in naval architecture among the leading European shipyards, and it is confidently expected that the new boat will excel any of his previous efforts. His plans for the new boat, so far as determined, include the following dimensions; length of keel, 365 feet; length over all, 385 feet; breadth of beam, 50 feet; depth of hold, 30 feet. She will be 63 feet longer and will have 10 feet more beam than the Susquehanna. The motive power will be supplied by a triple compound engine and four steel boilers. The hull will be constructed of steel with the exception of the decks, which will be of iron. The hold will be divided by water tight bulkheads, giving four cargo compartments, two machinery compartments, and two collision spaces. She will have a double bottom, which will give a water ballast compartment with a capacity for 150 tons, thus allowing of the steamer going from port to port without cargo. It is the intention of the builders to operate the steamer in connection with others that they intend building during the next year. It is not probable that the above dimensions are correct as it would not make a practical steamer. She would be shut out from many ports on the lakes and especially at Chicago where the spans of the bridges will not admit a vessel of 50 feet beam. The Commodore, whose breadth of beam is 42 feet 2 inches can pass but three of the draws at Chicago, and the Onoko with a trifle over 300 feet length covers the intervening space between three of the bridges in passing up the creek, necessitating the opening of three bridges at the same time.

MILWAUKEE.

Coal men are growing anxious lest the close of navigation finds them with short stocks. For some weeks past the local coal dealers have been taking all the vessels they could charter to arrive in Buffalo at the going rate. An agent of the Chicago firm has appeared on the market as an active competitor for vessels. Vesselmen, as soon as they learned the object of his visit, were inclined to stiffen up on rates. The best offer he received was 10 per cent advance on going rates when the vessel was ready to load. This was at first indignantly refused, but later on the vessel man was informed the offer would be taken under consideration. The coal stocks in this city are a number of thousand tons short of what is necessary for local consumption and distribution from here. A person interested in the trade said that it was feared the available tonnage was not sufficient to supply the deficiency between now and the close of navigation.

It is thought that the Milwaukee ship yard company' new launch, the Veronica, will carry more cargo than was calculated on.

At marshal's sale at Milwaukee, John Saveland bought the steambarge New Era for $3,000. She had been libeled for claims amounting to $4,000.

Captain Henry Leisk, part owner and long master of the schooner F. M. Knapp, took command of the steamer S. Langell at Port Huron on her last trip and will continue in that position. The Knapp is now sailed by Captain L. McFadden.

Information has been received at the office of Captain Davis, in charge of the government work in the harbors north of Milwaukee, that the contracts for the improvements of Cheboygan, Port Washington, and Manitowoc harbors had been awarded by the chief engineer to Truman & Cooper, of Manitowoc, and the work at Kewaunee harbor to Schwartz & Berner, of Green Bay. The figures of the contracts were as follows: Port Washington, $2,825; Sheboygan, $10,-791; Manitowoc, $14,037; Kewaunee, $7,265. The contracts for the work at Ontonagon and Grand Marais, Lake Superior, have not been awarded.

PORT ARTHUR.

While it is certain that some vessel has gone to the bottom of Lake Superior, all efforts to establish the identity have so far failed. It is now nearly two weeks since the vessel went down, and it is strange that her disappearance has not caused her owners or relatives of her crew to make inquiries. The disaster occurred about 135 miles east of here on an almost isolated and rockbound coast. It was first reported by Mr. Wilson, the storekeeper at Port Caldwell, who saw the vessel laboring heavily in a gale and flying a signal of distress, but nothing could be done towards rescuing the vessel or her crew and she went down in deep water five miles off the land. Since then considerable wreckage has been washed ashore. A yawl boat and two bodies were found on the beach at Jackfish Bay. Among the wreckage that came ashore at Peninsula harbor was the schooner's wheel, ten barrels of flour, a tub of Armour lard, and a tub of butter. Perhaps the publication of these may lead to the identification of the wreck. This is probably the little schooner reported as lost by the master of steamer City of Owen Sound and mentioned in the RECORD last week.

BELLEVILLE.

A demonstration in connection with the completion of the Murry canal was held here last Thursday. Sir John A. Macdonald and Ministers Bowell, Foster, and White were present and made speeches. The canal is four and one-half miles long and connects the head waters of the Bay of Quinte with Lake Ontario. The canal will effect a saving of two or three days on the round trip and will enable vessels to avoid the dangerous coast of Prince Edward's Island.

ERIE.

The storms which prevailed last spring washed away a section of the north shore of the peninsula and a bar formed near the north pier of the entrance to the Erie harbor. The government has granted James Rooney of Toledo the contract of dredging 44,000 yards, and the work will be commenced next week. The tugs Tuthill and Colton towed the dredges here from Ashtabula. The contract amounts to about $10,-000.

BAY CITY.

Special to the Marine Record.

The building of Captain Richard Armstrong's new passenger steamer at Frank Wheeler's shipyard, West Bay City, is progressing finely. It was at first intended that this steamer was to do fire patrol and passenger service at Duluth, but a recent rumor that the Saginaw river steamboat line intended to put steam pumps next season in their boats, and charge lumbermen for services rendered only, is liable to make a change in the new boat's route. It is said if things get too warm for the fire tugs that the new and elegant steamer Ossifrage will come to the rescue and form an opposition river line which all know there would certainly be no money in for either party. It is hoped that matters will be amicably adjusted.

It will be remembered that mention was made in the RECORD a few weeks ago of the tug O. W. Cheeney, while returning from Tawas, and in charge of an experienced person, ran into the schooner Dreadnaught, off Sand Point, sinking her. The Dreadnaught is owned by A. Cunning & Son, of this port, who have libeled the Cheeney in the sum of $1,500. Wm. Sharp & Company, owners of the Cheeney, gave the necessary bonds, and the case will come up before Judge Brown in Detroit.

A. C. McLean, Wm. Bridges and others have purchased the, steambarge A. A. Turner, of Mr. Rankin, of Detroit, for $15,000.

The White stack line tugs Dowling, Gibbs and Frank Tracy, have returned from the Sault and will tow on the river for the remainder of the season.

The tugs Anna and Willie Browne are to have new boilers put into them during the coming winter.

The steambarge Ed Smith and consorts Boscobel and Antelope, loaded at Tawas this trip for Tonawanda.

The schooner Mineral State has just finished discharging railroad iron for the Detroit, Alpena & Bay City railroad. She has been chartered to take lumber from Alabaster to Clevelnd.

Frank Wheeler, the live shipbuilder, of West Bay City, laid the keel, the other day, for two large boats, to be finished by the opening of navigation in 1887. Mr. Wheeler has contracted with Bartlett & Co., of East Saginaw, for two sets of their donkey engine hoisting machines and pumps combined.

The owners of the new vessel John F. Eddy have found that she is almost too large and too long-legged to load to her full capacity and be able to enter some ports.

SHAW.

THE navy department offers a prize of $15,000 for the best design of a war ship.

WANTED.

A MARINE BOILER, suitable for an 8x10 or 10x10 marine engine. Must be cheap and in good order. Address H. L. SHAW, E. Saginaw, Mich.

FOR SALE.

A fine little steam launch. 29 feet keel, 5½ feet beam, in first class order, and sold cheap. H. L. SHAW, E. Saginaw, Mich.

FOR SALE,

A POWERFUL RIVER AND HARBOR TUG.

Built for wrecking purposes. Length 87 feet, breadth 17 feet, depth 9 feet, draws 9 feet. New tonnage 40, old 81. Engine 22x24. She is allowed 90 pounds of steam. Has new main valve, new throttle valve, new eccentrics, two new tow posts, four new timber heads, one new metallic life boat and new wheel, ironed all around for work in ice. Cabin, pilot house and engine room remodeled. Can carry sixty (60) tons fuel, has forty life preservers, water-tight bulkheads, and is allowed to carry passengers. She rates A2, valued in Lloyd's at $10,000, and is warranted in first-class shape. Address MARINE RECORD OFFICE, Cleveland, Ohio.

PROPOSALS FOR RUBBLE STONE.

U. S. ENGINEER OFFICE, CLEVELAND, O., Sept. 25, 1886.

SEALED PROPOSALS, in duplicate, addressed to the undersigned, will be received at this office until 11o'clock a. m., Monday, October 18, 1886, for delivering and placing 3,600 cords, more or less, of Rubble stone in foundation for the breakwater at Cleveland Harbor, O.

Forms, specifications and other information can be obtained at this office.

The United States reserves the right to reject any or all proposals.

L. COOPER OVERMAN, Major of Engineers.

PUBLIC NOTICE—STURGEON BAY AND LAKE MICHIGAN SHIP CANAL.

U. S. ENGINEER OFFICE, MILWAUKEE, WIS. September 25, 1886.

The following provision is contained in the River and Harbor Act, approved August 5, 1886:

"The Secretary of War is authorized and directed "to appoint a board of three engineers of the United "States Army whose duty it shall be to examine, in "all their relations to commerce, the Sturgeon Bay and "Lake Michigan Ship Canal connecting the waters of "Green Bay with Lake Michigan, in the state of Wis-"consin, with a view to making the same a free pas-"age way and harbor of refuge; to consider their "value, and all other matters connected with their "usefulness to navigation, and which shall give infor-"mation as to the expediency of the work and the de-"sirability of their acquisition and improvement."

The Board of Engineers constituted in obedience to the foregoing law will assemble publicly at 366 Milwaukee street, Milwaukee, Wisconsin, Thursday, October 21, 1886, at 10 a. m. for the purpose of ascertaining through public discussions the opinion of the public in regard to the canal.

Written statements, which are specially invited should be sent to the undersigned not later than October 18, 1886, so that a full and exhaustive interchange of opinions may be had at the time of the meeting.

W. L. MARSHALL, Captain of Engineers.

MARITIME LAW.

FREIGHT LOST THROUGH COLLISION—SHIPOWNER'S RIGHT TO RECOVER IT AS ITEM OF HIS DAMAGE—REASONABLE DILIGENCE IN SECURING NEW CARGO REQUIRED.

Brown et al. vs. steam tug C. P. Raymond.

U. S. District Court, Southern, District of New York.

1. The loss of freight is a loss to be made good by the wrong doer in a case of collision.

2. But dead freight cannot be recovered unless it is shown that reasonable efforts have been made to supply the place of cargo sold as damaged on account of such collision.

Exceptions to commissioner's report.

Brown, J.

On the 11th of January, 1885 the bark Magarett Mitchell was so damaged by collision when on her way out to sea that her cargo of grain had to be discharged and a part of it sold. 26 Fed. Rep. 231. Maritime Register, Feb 3, 1886. She was sailing under charter, and after the sale of the damaged portion of her cargo, the master applied to the charterers for additional grain to supply the place of that sold. It was not furnished, and without further effort to procure additional cargo elsewhere, the bark, after being repaired, proceeding on her voyage.

The damages reported by the commissioner are in all $6,535.00. The libelants claimed dead freight to the amount of $490.55 additional for loss of the freight on the grain necessarily sold in consequence of the collision. The commissioner disallowed this item on the ground that the libelants admitted that they did not seek to obtain freight from outside parties.

The loss of freight is undoubtedly a loss to be made good by the wrong doer in a case of collision, as much as any other item of damage of which the collision is the direct and proximate cause. The Cayuga, 14 Wall. 270. But this rule does not dispense with reasonable diligence on the part of the vessel injured. Her legal damage is that which arises notwithstanding the use of reasonable diligence and judgment. Very recently this court has applied this qualification to the duty to raise and repair; and has disallowed the additional estimated cost of repair arising from unreasonable neglect to raise the sunken boat earlier. The Thomas P. Way, 28 Fed. Rep. Maritime Register September 1, 1886. The same rule must be applied to dead freight. Had reasonable efforts been made to supply the amount of cargo sold, and none found, I see no reason why the lost freight should not be recovered. The libelants claim that the burden of proof is upon the defendants to show that cargo might have been obtained of other parties than the charterer. But in the ordinary conditions of trade, shipments of grain, or other cargo at same rates, at least must be presumed to be procurable within a reasonable time, in the absence of all proof on the subject. As the libelants' have not shown any lack of ready freight in the market, and either applied to the defendants or to any other parties than the charterers, nor gave the defendants any notice or opportunity to supply the cargo to the bark, in place of that lost, the presumption is that the loss of dead freight was rather from the masters neglect to seek it than the necessary and direct consequence of the collision. It would be inequitable to impose upon the defendants a loss which presumably might have been avoided and which they were given no opportunity of preventing. The ruling of that commissioner is in this respect sustained.

The defendants have excepted to the number of days for which demurrage is allowed and also to the allowance of the charge for wharfage in addition to demurrage.

Upon consideration of all the circumstances I am not satisfied that the number of days allowed for is excessive. The wharfage as an additional item should, I think, be disallowed;—not because it is not in itself proper and recoverable, but because it ought to be deemed included in the rate charged for demurrage. The rate allowed is $57 per day. That is the rate of demurrage stipulated in the charter, and it is testified to as reasonable for this bark. It is conceded that under the charter the rate specified would include wharfage. It is a mere question of the mode of estimating the damage caused by the delay. When the damage is computed independently of wharfage, then wharfage is to be allowed as a separate item, otherwise not. The adoption of the charter rate of demurrage in this case and the want of any intimation in the testimony that the charter rate was not a full equivalent, at the time of the injury, for all the items that the charter rate usually covers, lead me to the conclusion that the rate should be deemed to cover wharfage.

In other respects the report is confirmed. September 25, 1886.

COLLISION—LIMITED LIABILITY—TERMINATION OF VOYAGE—OFFENDING SHIP.

Thommessen & al v. Whitwill.

Supreme Court of the United States. Appeal from the United States Circuit Court, E. D. of New York.

1. The decision in Place & als. v. the Norwich & New York Transportation Company, in relation to the time when the value of the owner's interest in the ship is to be taken for fixing the amount of his liability, applied to a case where the offending ship did not sink in consequence of the collision, but was afterwards sunk and wrecked in the same voyage by the negligent navigation of those in charge of her, the sinking being held to be the termination of the voyage.

2. The decision in the same case as to insurance repeated.

3. Limited liability may be claimed, 1st, merely by way of defence to an action; or, 2nd, by surrendering the ship or paying her value into court. The latter method is only necessary when the ship owner desires to bring all the creditors claiming damage into concourse for distribution.

Mr. Justice Bradley delivered the opinion of the court.

The case grew out of a collision which occurred on the 25th of March, 1876, on the high seas, 150 miles from Sandy Hook, between the Norwegian bark Daphne, belonging to the appellants and bound to Marseilles, and the British steamship Great Western, belonging to the respondent and others and bound to New York. The Daphne was injured about $7,000 worth, and the court below found that the Great Western was in fault, and was worth $150,000 both before and immediately after the collision; but that after the collision, and on the same day, the steamer, while still on her voyage to New York, was stranded and wrecked on the south coast of Long Island by the careless navigation and fault of those in charge of her, and from no cause connected with the collision. No freight was received by her owners. On the 29th of March they abandoned her to the underwriters, and received from them insurance to the amount of £34,000 as for a total loss. After this the wreck and materials saved were sold for account of the underwriters and by direction of the owners, and realized $1,796.14. On the 27th of March 1876, the libel was filed in this case on account of the owners of the Daphne, and Whitwill, the respondent, appeared and answered, denying that the Great Western was in fault, and claiming that if she should be found in fault, the owner's liability was limited to the amount or value of his interest in the vessel and her freight; and that this interest was of no value whatever, and to this he added by leave of the court during the trial, the following words: "And he hereby surrenders the same to the libelants. He also during the trial tendered an assignment of his interest to the libelants, and offered to give another assignment to a trustee for the benefit of the libelants under section 4285 of the Revised Statutes of the United States. The court below held that the owners of the Great Western were only liable for the proceeds of the wreck, amounting to $1,796.14, and gave a decree for that amount and interest, and for the costs of the libelants in the district court.

The errors assigned for the reversal of this decree are substantially as follows, to wit: First. That the limitation of the respondent's liability to the value of the ship and freight in the condition in which they were after the stranding and wreck is contrary to the rule contained in section 4283 of the Revised Statutes. Secondly. Because the insurance received by the owners was not included in the value of their interest in the ship, liable to be surrendered in order to obtain a limitation of liability, and was not taken into account in fixing the measure of such liability. Thirdly. Because the court allowed the respondent to amend his answer by the words "and he hereby surrenders the same to the libellants;" and permitted him to give in evidence his written surrender of his interest in the steamer to the libelants; and his offer to make a like surrender to a trustee for the benefit of the defendants. Fourthly. Because, without proof that the laws of Sweden and Great Britain are the same on the subject, the only law applicable to the case was the law of the forum, of which the general admiralty law forms no part.

The points raised in the first and second assignments have been already discussed and decided in the case of Place & als. v. the Norwich and New York Transportation Company. There is nothing peculiar in the present case, unless it be that the Great Western was not sunk or wrecked by means of the collision, but afterwards, by the carelessness of her master or crew. This can make no difference. We showed in the opinion referred to that the termination of the voyage is the point of time at which the value of the offending vessels to be taken. The voyage in the present case was not terminated until the vessel was sunk and stranded on the Long Island coast. The carelessness of the master and crew cannot vary the result. It is against their faults and negligence that the law was intended to protect the ship owner, provided the loss and damage sustained were caused without his privity or knowledge.

The third assignment of error cannot be maintained, because the evidence referred to therein, which the court allowed to be given on the trial, could not affect the result; nor was the amendment of the answer material. The answer, as originally framed, set up the defence that the liability of the respondent was limited to the amount or value of his interest in the Great Western and her freight upon the voyage, and averred that the interest was of no value. The issue being thus raised, the respondent was entitled to have the decree against him in that cause limited to the amount which should be shown, by the proofs on the trial, to be the value of said steamer and freight at the termination of the voyage. He did not need to make any surrender or attempts at a surrender. A surrender of the vessel, or payment of her proceeds, or value, into court would have been necessary in order to bring other creditors into concourse with the libelants; but for the mere defence of that cause it was not necessary. This disposes of the supposed difficulty in making an abandonment to the libelants after a surrender or abandonment to the insurers; a difficulty which we have already shown to be groundless in the opinion referred to.

The fourth assignment of error is not well taken, because the case was altogether decided according to the maritime law of this country, which is the law of the forum.

The decree of the circuit court is affirmed. May 10th. 1886.

OUR NEW NAVY.

Chief Constructor Wilson estimates the active life of the wooden war ships of our present navy, as follows: The Tennessee (the only one classed as first rate), six months; the Trenton, Omaha, and Vandalia, second rates, and the Michigan, third rates, ten years; the Lancaster and Brooklyn, second rates, and the Adams, Alliance, Essex, Enterprise, Nipsic, Tallapoosa, and Yantic, third rates, six years; the Hartford, Richmond, and Pensacola, second rates, and the Juniata, Ossipee, Quinnebaug, Swartara, Galena, Marion, Iroquois, and Kearsage, third rate, five years. These, together with the iron ships, Monocacy, Alert, and Ranger, third rates, and the Michigan, Palos, and Pinta, fourth rates, constitute the available fighting force of the present navy. The most powerful of their weapons are the converted guns, having a range of, perhaps, two miles, excellent arms for operations against wooden ships and ancient fortifications, or for shelling towns, but inefficient against the modern armor. The very best of these ships is held by our naval authorities to be far behind the times as a reliance for offense or defense in actual warfare. The list of ironclads comprises more than a dozen monitors, but none of them is in condition for service at this time. With this showing, the United States is placed by her own authorities at the foot of the list of naval powers in the essential matter of vessels and guns, there being three South American, two Asiatic, and fifteen or sixteen European powers which outrank us.

That portion of our prospective "new navy," whose construction has already been sanctioned by congress, numbers eighteen ships of all classes, to cost an aggregate of something more than twenty million dollars, and the list of which, barring accidents, or the failure of appropriations, is expected to be afloat four years hence. They are required to be built entirely of metal, and every device known and approved, at the date of their planning, to secure efficiency as fighting machines, has been, or is to be admitted in their construction. Their armament throughout will be of the modern high powers, the largest weapons at present contemplated being the twelve-inch breech-loading rifle, carrying a missile which weighs more than eight hundred pounds, and requiring more than four hundred pounds of powder for each discharge. The theoretical range of such weapons is about twelve miles, but difficulties in the matter of elevation and otherwise serve to reduce this somewhat in practice. Seven of these ships are to be armored, the heaviest probably carrying sixteen inches of steel as a protection. Three will be "protected cruisers;" that is, vessels whose thick lower decks of steel dip their edges below the water line and serve as a protection to the machinery, magazines, and other vital parts of the vessels. The others will be four steel cruisers, two gunboats, one first-class torpedo boat, and one dynamite gun cruiser. Of the steel cruisers, the Dolphin, 1,500 tons displacement, is already completed, and receiving her armament. The Atlanta, 3,000 tons, is on her trial trip, and her armament is being tested, while the Boston, 3,000 tons, and the Chicago, 4,500, are well advanced in construction. Five of the armored vessels are of the double-turret monitor class, each designed to carry four heavy high-powered guns throwing five hundred pound shells with a possible range of ten miles. These ships were planned ten years ago. Doubtless if planned to day some change would be made, but they are nevertheless spoken of by Commodore Wilson, in his last annual report, as the best type of coast and harbor defense vessels in existence. Though not designed for cruising they can in emergency be sent abroad, their seaworthiness having been well tested in the past. Congress has now supplied the means for furnishing these ships and the work is progressing rapidly. The Miantono nah, 3,815 tons, will be ready for service this year; the Puritan, 6,000 tons, has her engines in place, and is nearly ready for her armor; while the Terror, Amostrite, and Amadnock, 3,185 each, are now receiving their machinery. The other two armored ships have not yet entered upon their first stage of existence, their construction having only been authorized by congress at the end of its last session. They are to be of 6,000 tons displacement, to have double bottoms, engines designed to drive them at the rate of sixteen knots an hour, and complete torpedo outfits and armaments of the most effective kind, and are to cost not more than two and a half millions each. In the mere matter of displacement, these ships will exceed by nearly one-fourth the best and largest of our present naval vessels, while in speed and effectiveness they are intended to compare favorably with the better class of European cruising war ships. The cruiser will be a novelty, comparable probably to nothing now in existence. The secretary of the navy is authorized to make a contract with its inventors for its construction, and the department will have little or nothing to do with the work beyond passing judgment upon the plans in advance, and the result at its completion will be a vessel 130 feet long, proportionately very narrow, and of very light draft, with exceedingly powerful engines, guaranteed to be capable of producing a speed of twenty knots. In brief, the plans of this craft are understood to look to the placing of the machinery and other ordinary appliances of the ship toward the bow or stern, leaving the region amidships for the magazines and pneumatic guns, the latter being fixed in position and having a high elevation. The dynamite missiles will be thrown like bombs from an ordinary mortar. With all these vessels afloat the United States, as a naval power, will outrank Brazil, Chili, the Argentine Republic, China, Japan, Greece, Norway, Portugal, and Sweden, and will be abreast of Turkey, Spain, Holland and Denmark. She will still be outranked by England, France, Germany, Austria, Italy and Russia.

KNOTS AND MILES.

There are probably no two words in the English language having entirely different meanings, that are more commonly used to express the same thing than the terms knots and miles. To one having constant reference to marine reports, it is not only troublesome to convert these terms to the same standard for comparing results, but it is often quite impossible to determine which is meant, especially in relation to the speed of vessels in inland waters. It may be interesting to our readers to know exactly what is meant by a knot or sea mile, so we publish the following statement, which is accepted by the United States naval service as the standard measurement. At the high speeds now maintained by some of our ocean steamships, and especially at the still higher rates attained by torpedo boats, it is not a little surprising when we turn their velocity into miles to notice how nearly they approach average railroad time.

The length of the nautical mile is defined as the one-sixth part of a degree of the great circle of the earth. If the earth were a perfect sphere of known dimensions, the length of a nautical mile, according to the above definition, would be a definite and invariable quantity.

Owing, however, to the earth's compression at the poles, and the consequent difference in the lengths of the radi of curvature at different points of its surface much diversity has arisen in usage and in books of reference, in assigning the length of a nautical mile. Thus, it is variously given as equal to the mean length of a minute of latitude on the meridian, and the length of a minute of the meridian corresponding to the radius of curvature of the particular latitude, and the length of a minute of longitude on the equator, the latter definition being probably due to common use among mariners, of Mercator's projection in which degrees of the successive parallels of latitude are equal to those on the equator.

In order to remove all uncertainty, and to introduce uniformity, the service adopted, several years ago, the value which results from considering the nautical mile as equal to the one-sixtieth part of the length of a degree on the great circle of a sphere whose surface is equal to the surface of the earth. This value, computed on Clark's spheriod, is:

One nautical mile=1853.248 meters=6080 27 feet, a value which corresponds to the adopted length of the admiralty knot=6080 feet.

In the following tables are given the numercial results of the discussion relating to this subject:

	Meters.	Feet.
Length of 1′ on the equator	1855.345	6087.15
Length of 1′ of latitude at the equator	1842.787	6045.95
Length of 1′ of latitude at the pole	1861.655	6107.85
Length of 1′ of latitude 45°	1852,181	6076.76
Length of 1′ on the surface of a sphere.		
Radius equal to the mean of the semi axes of the earth	1852.200	6076.82
Area of a great circle equal to area of plane of meridian of the earth	1852.197	6076.82
Radius equal to average radius of curvature of meridian of the earth	1852.201	6076.82
Surface equal to the surface of the earth.	1853.248	6080.27
Volume equal to the volume of the earth	1853.246	6080.26

—*Mechanical Engineer.*

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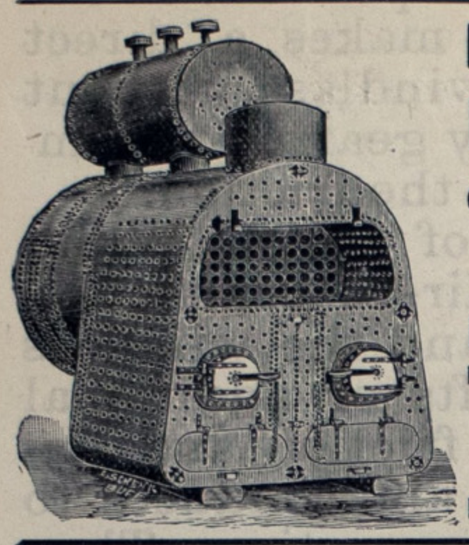

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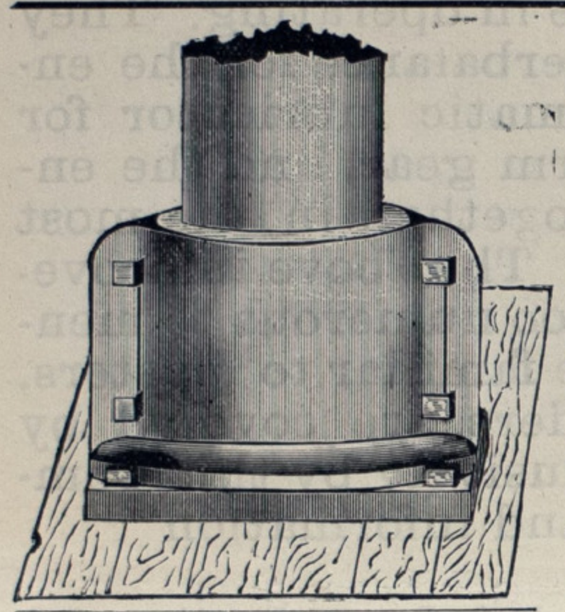

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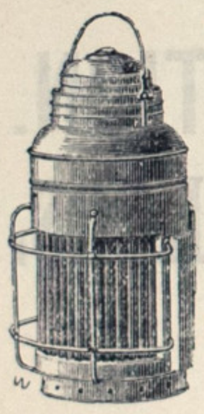

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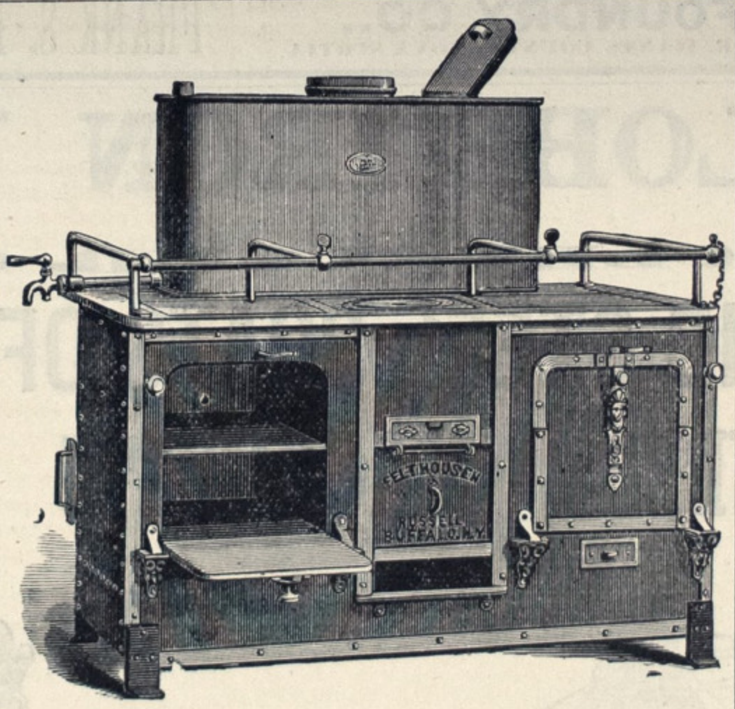

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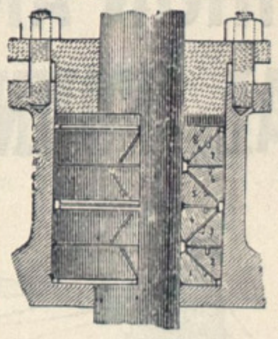

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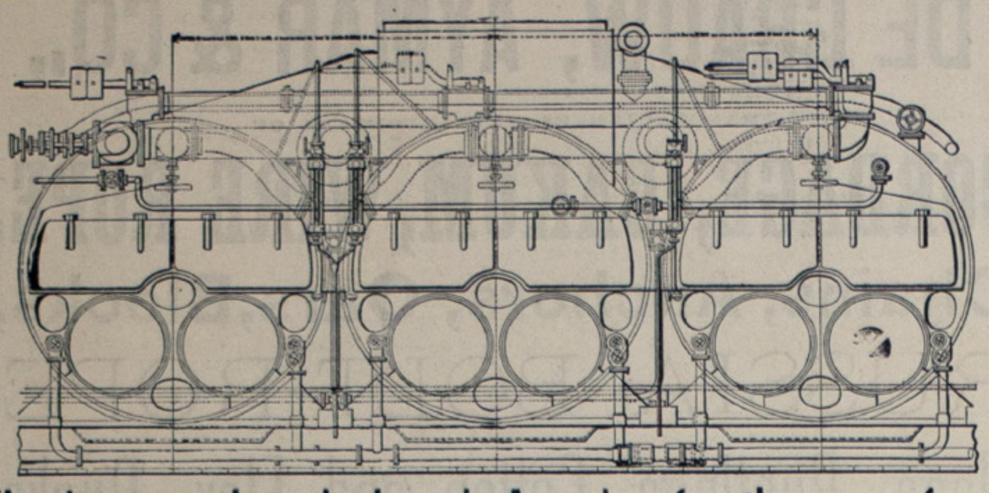

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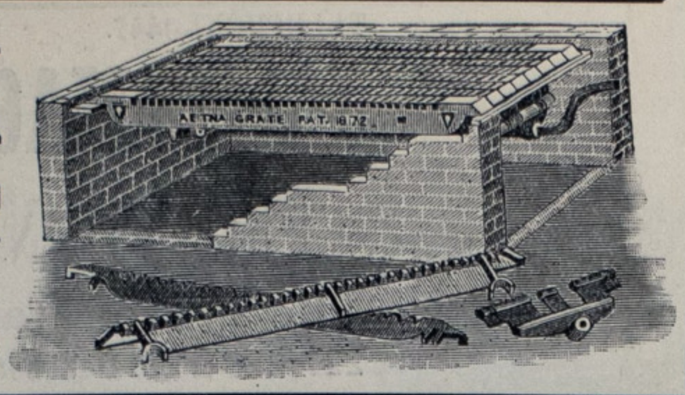

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In all their styles of Steam Windlasses they make a direct connection between the engines and the windlass without counter shafts or additional gearing. This saves friction and liability to break down and conduces to durability and ease in operating. They also have a counterbalance for the engines and an automatic lubricator for the worm and worm gear, and the engines are placed together in the most accessible position. The above improvements and others too numerous to mention, but which are familiar to Masters, Owners and Builders, are covered by Patents owned exclusively by this Company. For plans and information

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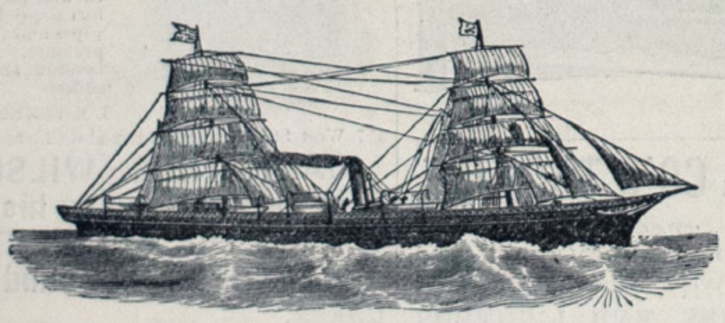

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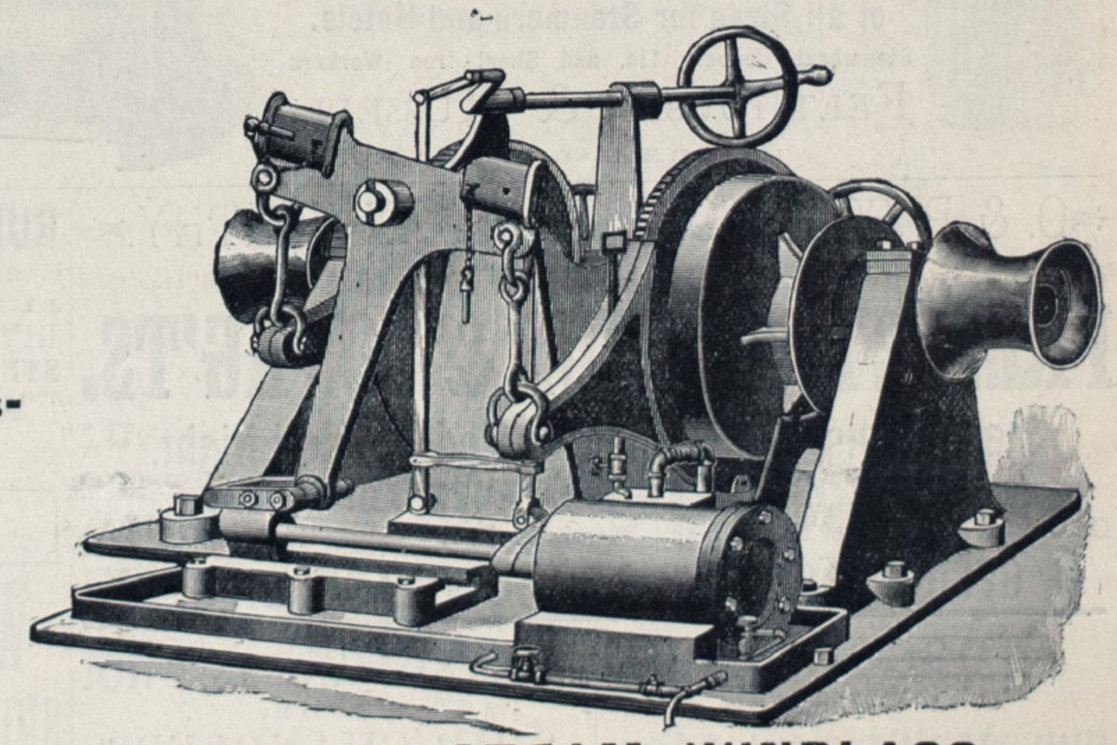

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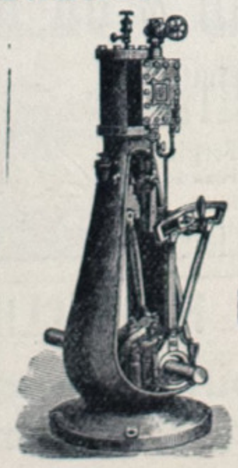

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